EXHIBIT 2

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

12/239,001

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Applicant:

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Group Art Unit:

2471

Examiner:

Soon D. Hyun

Title:

SYSTEM AND METHOD FOR COMMUNICATING WITH

OBJECTS ON A NETWORK

Attorney Docket:

9919-000002/COE

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

AMENDMENT AND PETITION FOR EXTENSION OF TIME

Sir:

In response to the Office Action mailed June 9, 2011 and the telephonic interview conducted on September 1, 2011, please consider the amendments and remarks set forth below.

Applicant hereby petitions under the provisions of 37 C.F.R. § 1.136(a) for an extension of time in which to respond to the outstanding Office Action and includes a fee as set forth in 37 C.F.R. § 1.17(a) with this response for such extension of time.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 25 of this paper.

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-424. (Cancelled)

425. (Previously Presented) A method for adapting a piece of Ethernet data terminal equipment, the piece of Ethernet data terminal equipment having an Ethernet connector, the method comprising:

selecting contacts of the Ethernet connector comprising a plurality of contacts, the selected contacts comprising at least one of the plurality of contacts of the Ethernet connector and at least another one of the plurality of contacts of the Ethernet connector;

coupling at least one path across the selected contacts of the Ethernet connector; and associating information about the piece of Ethernet data terminal equipment to impedance within the at least one path.

- 426. (Previously Presented) The method according to Claim 425 wherein the piece of Ethernet data terminal equipment is a personal computer.
- 427. (Previously Presented) The method according to Claim 425 wherein the associating information about the piece of Ethernet data terminal equipment to impedance within the at least one path comprises associating distinguishing information about the piece of Ethernet data terminal equipment to impedance within the at least one path.

428. (Previously Presented) The method according to Claim 425 wherein the Ethernet connector comprising the plurality of contacts is an RJ45 jack comprising the contact 1

through the contact 8.

429. (Previously Presented) The method according to Claim 425 wherein the

impedance within the at least one path is part of a detection protocol.

430. (Previously Presented) The method according to Claim 425 wherein the piece of

Ethernet data terminal equipment is a piece of BaseT Ethernet data terminal equipment.

431. (Previously Presented) The method according to Claim 425 wherein the at least

one of the plurality of contacts of the Ethernet connector comprises two of the plurality of

contacts of the Ethernet connector.

432. (Previously Presented) The method according to Claim 425 wherein the at least

another one of the plurality of contacts of the Ethernet connector comprises two of the plurality

of contacts of the Ethernet connector.

433. (Previously Presented) The method according to Claim 425 wherein the

Ethernet connector is an RJ45 jack comprising the contact 1 through the contact 8, the at least

one of the plurality of contacts of the Ethernet connector comprises two of the plurality of

contacts of the Ethernet connector and the two of the plurality of contacts comprise the contact

3 and the contact 6.

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434. (Previously Presented) The method according to Claim 425 wherein the coupling

at least one path across the selected contacts comprises coupling at least one path having at

least one resistor.

435. (Previously Presented) The method according to Claim 425 wherein the coupling

at least one path across the selected contacts comprises coupling two paths across the

selected contacts.

436. (Previously Presented) The method according to Claim 425 wherein the coupling

at least one path across the selected contacts comprises coupling two paths across the

selected contacts, at least one of the two paths having a zener diode.

437. (Previously Presented) The method according to Claim 425 wherein the coupling

at least one path across the selected contacts comprises coupling at least one path having a

controller across the selected contacts.

438. (Previously Presented) The method according to Claim 425 wherein the

Ethernet connector is an RJ45 jack comprising the contact 1 through the contact 8 and the

piece of Ethernet data terminal equipment is a piece of BaseT Ethernet terminal data

equipment.

439. (Previously Presented) The method according to Claim 425 wherein the

Ethernet connector is an RJ45 jack comprising the contact 1 through the contact 8 and the

associating information about the piece of Ethernet data terminal equipment to impedance

within the at least one path comprises associating distinguishing information about the piece of

Ethernet data terminal equipment to impedance within the at least one path.

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440. (Previously Presented) The method according to Claim 425 wherein the

associating information about the piece of Ethernet data terminal equipment to impedance

within the at least one path comprises associating distinguishing information about the piece of

Ethernet data terminal equipment to impedance within the at least one path and the piece of

Ethernet data terminal equipment is a piece of BaseT Ethernet data terminal equipment.

441. (Previously Presented) The method according to Claim 425 wherein the

Ethernet connector is an RJ45 jack comprising the contact 1 through the contact 8, the piece of

Ethernet data terminal equipment is a piece of BaseT Ethernet data terminal equipment and the

associating information about the piece of Ethernet data terminal equipment to impedance

within the at least one path comprises associating distinguishing information about the piece of

Ethernet data terminal equipment to impedance within the at least one path.

442. (Previously Presented) The method according to Claim 425 wherein the

associating information about the piece of Ethernet data terminal equipment to impedance

within the at least one path comprises associating information related to an electrical aspect of

the piece of Ethernet data terminal equipment to impedance within the at least one path.

443. (Previously Presented) The method according to Claim 425 wherein the

associating information about the piece of Ethernet data terminal equipment to impedance

within the at least one path comprises associating information related to a physical aspect of the

piece of Ethernet data terminal equipment to impedance within the at least one path.

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444. (Previously Presented) The method according to Claim 425 wherein the associating information about the piece of Ethernet data terminal equipment to impedance within the at least one path comprises associating information about the piece of Ethernet data terminal equipment to impedance within the at least one path having at least one predetermined duration.

- 445. (Previously Presented) The method according to Claim 444 wherein the impedance within the at least one path is between 10k Ohms and 15k Ohms.
- 446. (Previously Presented) The method according to Claim 425 wherein the impedance within the at least one path is a function of voltage across the selected contacts.
- 447. (Previously Presented) The method according to Claim 425 wherein the at least one path includes the center tap of at least one isolation transformer.
- 448. (Previously Presented) The method according to Claim 425 further comprising physically connecting the adapted piece of Ethernet data terminal equipment to a network.
- 449. (Previously Presented) The method according to Claim 425 wherein the selected contacts are the same contacts used for normal network communication.
- 450. (Previously Presented) The method according to Claim 449 wherein the normal network communication is BaseT Ethernet communication.

451. (Previously Presented) The method according to Claim 425 wherein the at least one path coupled across the selected contacts is formed through the piece of Ethernet data terminal equipment.

- 452. (Previously Presented) The method according to any one of Claims 425 through 450 wherein the at least one path coupled across the selected contacts is formed through the piece of Ethernet data terminal equipment.
- 453. (Currently Amended) The method according to any one of Claims 425 through 448 and Claim 451 wherein the selected contacts are <u>at least some of</u> the same contacts used for normal network communication.
- 454. (Previously Presented) The method according to Claim 453 wherein the normal network communication is BaseT Ethernet communication.
- 455. (Currently Amended) An adapted piece of Ethernet data terminal equipment comprising[[;]]:

an Ethernet connector comprising a plurality of contacts; and

at least one path coupled across selected contacts, the selected contacts comprising at least one of the plurality of contacts of the Ethernet connector and at least another one of the plurality of contacts of the Ethernet connector,

<u>wherein</u> information about the piece of Ethernet data terminal equipment <u>is</u> associated to impedance within the at least one path.

456. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the piece of Ethernet data terminal equipment is a personal computer.

- 457. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the information about the piece of Ethernet data terminal equipment associated to impedance within the at least one path comprises distinguishing information about the piece of Ethernet data terminal equipment.
- 458. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the Ethernet connector is an RJ45 jack and the plurality of contacts comprises the contact 1 through the contact 8 of the RJ45 jack.
- 459. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the impedance within the at least one path is part of a detection protocol.
- 460. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the piece of Ethernet data terminal equipment is a piece of BaseT Ethernet data terminal equipment.
- 461. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the at least one of the plurality of contacts of the Ethernet connector comprises two of the plurality of contacts of the Ethernet connector.
- 462. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the at least another one of the plurality of contacts of the Ethernet connector comprises two of the plurality of contacts of the Ethernet connector.

- 463. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the Ethernet connector is an RJ45 jack comprising the contact 1 through the contact 8, the at least one of the plurality of contacts of the Ethernet connector comprises two of the plurality of contacts of the Ethernet connector and the two of the plurality of contacts comprise the contact 3 and the contact 6.
- 464. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the at least one path comprises at least one resistor.
- 465. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the at least one path comprises two paths.
- 466. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 465 wherein one of the two paths comprises a zener diode.
- 467. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the at least one path comprises a controller.
- 468. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the Ethernet connector is an RJ45 jack comprising the contact 1 through the contact 8 and the piece of Ethernet data terminal equipment is a piece of BaseT Ethernet data terminal equipment.

469. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the Ethernet connector is an RJ45 jack comprising the contact 1 through the contact 8 and the information about the piece of Ethernet data terminal equipment associated to impedance within the at least one path comprises distinguishing information about the piece of Ethernet data terminal equipment.

- 470. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the information about the piece of Ethernet data terminal equipment associated to impedance within the at least one path comprises distinguishing information about the piece of Ethernet data terminal equipment and the piece of Ethernet data terminal equipment is a piece of BaseT Ethernet data terminal equipment.
- 471. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the Ethernet connector is an RJ45 jack comprising the contact 1 through the contact 8, the piece of Ethernet data terminal equipment is a piece of BaseT Ethernet data terminal equipment and the information about the piece of Ethernet data terminal equipment associated to impedance within the at least one path comprises distinguishing information about the piece of Ethernet data terminal equipment.
- 472. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the information is related to an electrical aspect of the piece of Ethernet data terminal equipment.
- 473. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the information is related to a physical aspect of the piece of Ethernet data terminal equipment.

474. (Previously Presented) The piece of Ethernet data terminal equipment according

to Claim 455 wherein the information about the piece of Ethernet data terminal equipment

associated to impedance within the at least one path comprises information about the piece of

Ethernet data terminal equipment associated to impedance within the at least one path having a

predetermined time duration.

475. (Previously Presented) The piece of Ethernet data terminal equipment according

to Claim 474 wherein impedance within the at least one path is between 10k Ohms and 15k

Ohms.

476. (Previously Presented) The piece of Ethernet data terminal equipment according

to Claim 455 wherein the impedance within the at least one path is a function of voltage across

the selected contacts.

477. (Previously Presented) The piece of Ethernet data terminal equipment according

to Claim 455 wherein the at least one path includes the center tap of at least one isolation

transformer.

478. (Previously Presented) The piece of Ethernet data terminal equipment according

to Claim 455 wherein the adapted piece of Ethernet data terminal equipment is physically

connected to a network.

479. (Previously Presented) The piece of Ethernet data terminal equipment according

to Claim 455 wherein the selected contacts are the same contacts used for normal network

communication.

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480. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 479 wherein the normal network communication is BaseT Ethernet communication.

- 481. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 455 wherein the at least one path coupled across the selected contacts is formed through the piece of Ethernet data terminal equipment.
- 482. (Previously Presented) The piece of Ethernet data terminal equipment according to any one of Claims 455 through 480 wherein the at least one path coupled across the selected contacts is formed through the piece of Ethernet data terminal equipment.
- 483. (Currently Amended) The piece of Ethernet data terminal equipment according to any one of Claims 455 through 478 and Claim 481 wherein the selected contacts are <u>at least</u> some of the same contacts used for normal network communication.
- 484. (Previously Presented) The piece of Ethernet data terminal equipment according to Claim 483 wherein the normal network communication is BaseT Ethernet communication.
- 485. (New) The method according to Claim 425 wherein the piece of Ethernet data terminal equipment is powered-on.
- 486. (New) The method according to any one of Claims 425 through 451 and Claim 485 wherein the at least one path permits use of the selected contacts for Ethernet communication.

487. (New) The method according to Claim 486 wherein the selected contacts are used for Ethernet communication.

- 488. (New) The piece of Ethernet data terminal equipment according to Claim 455 wherein the piece of Ethernet data terminal equipment is powered-on.
- 489. (New) The piece of Ethernet data terminal equipment according to any one of Claims 455 through 478 and Claim 488 wherein the at least one path permits the use of the selected contacts for Ethernet Communication.
- 490. (New) The piece of Ethernet data terminal equipment according to Claim 489 wherein the selected contacts are used for Ethernet Communication.
- 491. (New) A method for adapting a piece of terminal equipment, the piece of terminal equipment having an Ethernet connector, the method comprising:

coupling at least one path across specific contacts of the Ethernet connector, the at least one path permits use of the specific contacts for Ethernet communication, the Ethernet connector comprising the contact 1 through the contact 8, the specific contacts of the Ethernet connector comprising at least one of the contacts of the Ethernet connector and at least another one of the contacts of the Ethernet connector; and

arranging impedance within the at least one path to distinguish the piece of terminal equipment.

492. (New) The method according to Claim 491 wherein the piece of terminal equipment is a personal computer.

493. (New) The method according to Claim 491 wherein the arranging impedance

within the at least one path to distinguish the piece of terminal equipment comprises arranging

impedance within the at least one path to uniquely distinguish the piece of terminal equipment.

494. (New) The method according to Claim 491 wherein the arranging impedance

within the at least one path to distinguish the piece of terminal equipment comprises arranging

impedance within the at least one path to identify the piece of terminal equipment.

495. (New) The method according to Claim 491 wherein the arranging impedance

within the at least one path to distinguish the piece of terminal equipment comprises arranging

impedance within the at least one path to uniquely identify the piece of terminal equipment.

496. (New) The method according to claim 491 wherein the piece of terminal

equipment has a particular electrical aspect and the arranging impedance within the at least one

path to distinguish the piece of terminal equipment comprises arranging impedance within the at

least one path to distinguish that the piece of terminal equipment has the particular electrical

aspect.

497. (New) The method according to Claim 491 wherein the arranging impedance

within the at least one path comprises arranging impedance within the at least one path to be

part of a detection protocol.

498. (New) The method according to Claim 491 wherein the arranging impedance

within the at least one path comprises arranging impedance within the at least one path to be

variable.

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499. (New) The method according to Claim 491 wherein the arranging impedance within the at least one path comprises arranging impedance within the at least one path to be continuously variable.

500. (New) The method according to Claim 491 wherein the arranging impedance within the at least one path comprises arranging the impedance within the at least one path to draw DC current.

501. (New) The method according to Claim 491 wherein the arranging impedance within the at least one path comprises arranging the impedance within at least one path to have at least one predetermined duration.

- 502. (New) The method according to 501 wherein the predetermined duration is between 17 and 833 microseconds.
- 503. (New) The method according to Claim 491 wherein the arranging impedance within the at least one path comprises arranging impedance within the at last one path to be between 10k Ohms and 15k Ohms.
- 504. (New) The method according to Claim 491 wherein the arranging impedance within the at least one path comprises arranging impedance within the at least one path to be a function of voltage across the specific contacts.
- 505. (New) The method according to Claim 491 wherein the arranging impedance within the at least one path comprises arranging impedance within at least one path to have a first impedance followed by a second impedance.

- 506. (New) The method according to Claim 491 wherein the arranging impedance within the at least one path comprises arranging impedance within the at least one path to have a first impedance for a first condition applied to the specific contacts followed by a second impedance for a second condition applied to the specific contacts.
- 507. (New) The method according to Claim 506 wherein the first and second conditions applied to the specific contacts are voltage conditions.
- 508 (New) The method according to Claim 507 wherein the voltage conditions are DC voltage conditions.
- 509. (New) The method according to Claim 506 wherein the first and second conditions applied to the specific contacts are current conditions.
- 510. (New) The method according to Claim 509 wherein the current conditions are DC current conditions.
- 511. (New) The method according to Claim 491 wherein the piece of terminal equipment is powered-on.
- 512. (New) The method according to Claim 491 wherein the coupling at least one path across the specific contacts comprises coupling a controller across the specific contacts.
- 513. (New) The method according to Claim 491 wherein the coupling at least one path across the specific contacts comprises coupling a zener diode across the specific contacts.

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- 514. (New) The method according to Claim 491 wherein the coupling at least one path across the specific contacts comprises coupling an energy storage device across the specific contacts.
- 515. (New) The method according to Claim 491 wherein the coupling at least one path comprises coupling the at least one path internal to the piece of terminal equipment.
- 516. (New) The method according to Claim 491 wherein the Ethernet connector is an RJ45 jack comprising the contact 1 through the contact 8.
- 517. (New) The method according to Claim 491 wherein the specific contacts are used for Ethernet communication.
- 518. (New) The method according to Claim 491 wherein the specific contacts are used for Ethernet communication and at least some of the specific contacts are actually carrying Ethernet signals.
- 519. (New) The method according to Claim 491 wherein the specific contacts are used for Ethernet communication and at least some of the specific contacts are actually carrying DC current.
- 520. (New) The method according to Claim 491 wherein the specific contacts are used for Ethernet communication and at least some of the specific contacts are actually carrying Ethernet signals and DC current.

- 521. (New) The method according to Claim 491 wherein the at least one path includes the center tap of at least one isolation transformer.
- 522. (New) The method according to Claim 491 further comprising physically connecting the adapted piece of terminal equipment to a network.
- 523. (New) The method according to Claim 491 further comprising at least one electrical condition applied to the specific contacts.
- 524. (New) The method according to Claim 523 wherein the at least one electrical condition comprises a voltage applied across the specific contacts.
 - 525. (New) The method according to Claim 524 wherein the voltage is a DC voltage.
- 526. (New) The method according to Claim 523 wherein the at least one electrical condition comprises a current applied to the specific contacts.
 - 527. (New) The method according to Claim 526 wherein the current is a DC current.
- 528. (New) The method according to Claim 491 wherein Ethernet communication is BaseT Ethernet communication.
- 529. (New) The method according to Claim 491 wherein the at least one of the specific contacts comprises the contact 1 and the contact 2 and the at least another one of the specific contacts comprises the contact 3 and the contact 6.

530. (New) The method according to any one of Claims 491 through 528 wherein the piece of terminal equipment is a piece of Ethernet data terminal equipment.

- 531. (New) The method according to Claim 530 wherein the at least one of the specific contacts comprises the contact 1 and the contact 2 and the at least another one of the specific contacts comprises the contact 3 and the contact 6.
- 532. (New) An adapted piece of terminal equipment having an Ethernet connector, the piece of terminal of equipment comprising:

at least one path coupled across specific contacts of the Ethernet connector, the at least one path permits use of the specific contacts for Ethernet communication, the Ethernet connector comprising the contact 1 through the contact 8, the specific contacts comprising at least one of the contacts of the Ethernet connector and at least another one of the contacts of the Ethernet connector, impedance within the at least one path arranged to distinguish the piece of terminal equipment.

- 533. (New) The piece of terminal equipment according to Claim 532 wherein the piece of terminal equipment is a personal computer.
- 534. (New) The piece of terminal equipment according to Claim 532 wherein the impedance within the at least one path is arranged to uniquely distinguish the piece of terminal equipment.
- 535. (New) The piece of terminal equipment according to Claim 532 wherein the impedance within the at least one path is arranged to identify the piece of terminal equipment.

- 536. (New) The piece of terminal equipment according to Claim 532 wherein the impedance within the at least one path is arranged to uniquely identify the piece of terminal equipment.
- 537. (New) The piece of terminal equipment according to Claim 532 wherein the piece of terminal equipment has a particular electrical aspect and the impedance within the at least one path is arranged to distinguish that the piece of terminal equipment has the particular electrical aspect.
- 538. (New) The piece of terminal equipment according to Claim 532 wherein the impedance within the at least one path is arranged to be part of a detection protocol.
- 539. (New) The piece of terminal equipment according to Claim 532 wherein the impedance within the at least one path is arranged to be variable.
- 540. (New) The piece of terminal equipment according to Claim 532 wherein the impedance within the at least one path is arranged to be continuously variable.
- 541. (New) The piece of terminal equipment according to Claim 532 wherein the impedance within the at least one path is arranged to draw DC current.
- 542. (New) The piece of terminal equipment according to Claim 532 wherein the impedance within the at least one path is arranged to have at least one predetermined duration.
- 543. (New) The piece of terminal equipment according to Claim 542 wherein the predetermined duration is between 17 and 833 microseconds.

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544. (New) The piece of terminal equipment according to Claim 532 wherein the

impedance within the at least one path is arranged be between 10k Ohms and 15k Ohms.

545. (New) The piece of terminal equipment according to Claim 532 wherein the

impedance within the at least one path is arranged to be a function of voltage across the

specific contacts.

546. (New) The piece of terminal equipment according to Claim 532 wherein the

impedance within the at least one path is arranged to have a first impedance followed by a

second impedance.

547. (New) The piece of terminal equipment according to Claim 532 wherein the

impedance within the at least one path is arranged to have a first impedance for a first condition

applied to the specific contacts followed by a second impedance for second condition applied to

the specific contacts.

548. (New) The piece of terminal equipment according to Claim 547 wherein the first

and second conditions applied to the specific contacts are voltage conditions.

549. (New) The piece of terminal equipment according to Claim 548 wherein the

voltage conditions are DC voltage conditions.

550. (New) The piece of terminal equipment according to Claim 547 wherein the first

and second conditions applied to the specific contacts are current conditions.

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- 551. (New) The piece of terminal equipment according to Claim 550 wherein the current conditions are DC current conditions.
- 552. (New) The piece of terminal equipment according to Claim 532 wherein the piece of terminal equipment is powered-on.
- 553. (New) The piece of terminal equipment according to Claim 532 wherein a controller is coupled across the specific contacts.
- 554. (New) The piece of terminal equipment according to Claim 532 wherein a zener diode is coupled across the specific contacts.
- 555. (New) The piece of terminal equipment according to Claim 532 wherein an energy storage device is coupled across the specific contacts.
- 556. (New) The piece of terminal equipment according to Claim 532 wherein the at least one path is internal to the piece of terminal equipment.
- 557. (New) The piece of terminal equipment according to Claim 532 wherein the Ethernet connector is an RJ45 jack connector comprising the contact 1 through the contact 8.
- 558. (New) The piece of terminal equipment according to Claim 532 wherein the specific contacts are used for Ethernet communication.

- 559. (New) The piece of terminal equipment according to Claim 532 wherein the specific contacts are used for Ethernet communication and at least some of the specific contacts are actually carrying Ethernet signals.
- 560. (New) The piece of terminal equipment according to Claim 532 wherein the specific contacts are used for Ethernet communication and at least some of the specific contacts are actually carrying DC current.
- 561. (New) The piece of terminal equipment according to Claim 532 wherein the specific contacts are used for Ethernet communication and at least some of the specific contacts are actually carrying Ethernet signals and DC current.
- 562. (New) The piece of terminal equipment according to Claim 532 wherein the at least one path includes the center tap of at least one isolation transformer.
- 563. (New) The piece of terminal equipment according to Claim 532 wherein the adapted piece of terminal equipment is physically connected to a network.
- 564. (New) The piece of terminal equipment according to Claim 532 wherein at least one electrical condition is applied to the specific contacts.
- 565. (New) The piece of terminal equipment according to Claim 564 wherein the at least one electrical condition comprises a voltage applied across the specific contacts.
- 566. (New) The piece of terminal equipment according to Claim 565 wherein the voltage is a DC voltage.

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- 567. (New) The piece of terminal equipment according to Claim 564 wherein the at least one electrical condition comprises a current applied to the specific contacts.
- 568. (New) The piece of terminal equipment according to Claim 567 wherein the current is a DC current.
- 569. (New) The piece of terminal equipment according to Claim 532 wherein Ethernet communication is BaseT Ethernet Communication.
- 570. (New) The piece of terminal equipment according to Claim 532 wherein the at least one of the specific contacts comprises the contact 1 and the contact 2 and the at least another one of the specific contacts comprises the contact 3 and the contact 6.
- 571. (New) The piece of terminal equipment according to any one of claims 532 through 569 wherein the piece of terminal equipment is a piece of Ethernet data terminal equipment.
- 572. (New) The piece of terminal equipment according to Claim 571 wherein the at least one of the specific contacts comprises the contact 1 and the contact 2 and the at least another one of the specific contacts comprises the contact 3 and the contact 6.

REMARKS

Claims 425-572 are now pending in the application. By way of the present Amendment, new Claims 485-572 were added. Moreover, Claim 455 was amended for grammatical reasons. The amendment to Claim 455 is of equivalent scope as originally filed and was not made in response to a rejection and, thus, is not a narrowing amendment. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the remarks contained herein.

TELEPHONIC INTERVIEW

Applicant wishes to thank the Examiner for the courtesies extended during the telephonic interview conducted on September 1, 2011. During that telephonic interview, the Examiner and Applicant discussed the outstanding rejections in connection with the specification, drawings, and industry standards. Applicant argued that the specification, drawings, and industry standards are clear as to the definition of "contacts" and the novelty of the present claims. It is Applicant's understanding that based on the telephonic interview and the arguments set forth herein, the rejections under §112, first paragraph and second paragraph have been overcome.

REJECTION UNDER 35 U.S.C. § 112

Claims 425-484 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

The Examiner states that the specification does not disclose "selecting contacts . . . and at least another contact . . . associating information about the piece . . . at least one path". (Office Action mailed June 9, 2011, page 2). The Examiner concludes this section with a statement that "there is no selection of 'contact'." (Id.) Applicant is unsure of the full basis of the Examiner's rejection and assumes the Examiner is objecting to the use of "selecting".

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contacts." If the Applicant's assumption is incorrect, Applicant requests the Examiner clarify the rejection so that the Applicant can more fully address the Examiner's assertion.

Notwithstanding, Applicant submits that the originally-filed specification and industry standards do in fact disclose all of the claimed features and that one having ordinary skill in the art would readily appreciate that the inventors had possession of the claimed invention at the time of filing.

Applicant thus submits that one having ordinary skill in the art recognizes that the term "contact" is synonymous with contacts, as that term is used in the industry and industry standards. For example, according to IEEE Std. 802.3i (1990), an MDI Connector is defined as having 8 "contacts". Specifically, IEEE Std. 802.3i (1990) states:

14.5.1 MDI Connectors. Eight-pin connectors meeting the requirements of Section 3 and Figures 1–5 of ISO 8877 [16] shall be used as the mechanical interface to the twisted-pair link segment. The plug connector shall be used on the twisted-pair link segment and the jack on the MAU. These connectors are depicted (for informational use only) in Figs 14-20 and 14-21. The following table shows the assignment of signals to connector contacts.

CONTACT	MDI SIGNAL
1	TD+
2	TD-
3	RD+
4	Not used by 10BASE-T
5	Not used by 10BASE-T
6	RD-
7	Not used by 10BASE-T
8	Not used by 10BASE T

14.5.2 Crossover Function. A crossover function shall be implemented in every twisted-pair link. The crossover function connects the transmitter of one MAU to the receiver of the MAU at the other end of the twisted-pair link. Crossover functions may be implemented internally to a MAU or elsewhere in the twisted-pair link. For MAUs that do not implement the crossover function, the signal names of 14.5.1 refer to their own internal circuits. For MAUs that do implement the crossover function, the signal names refer to the remote MAU of the twisted-pair link. Additionally, the MDI connector for a MAU that

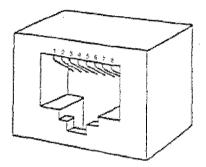


Fig 14-20 MAU MDI Connector

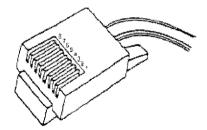
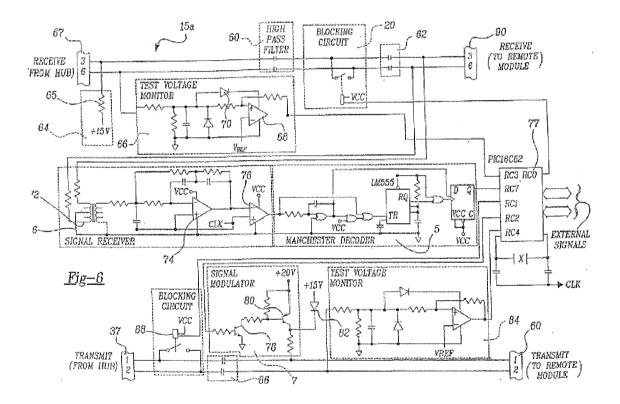


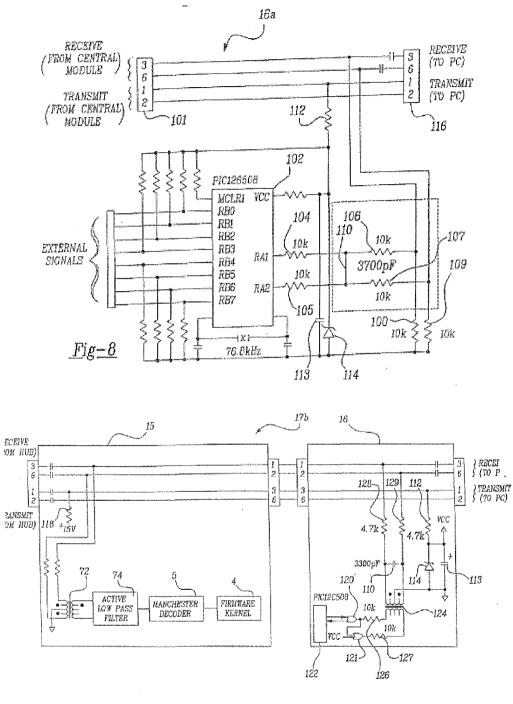
Fig 14-21
Twisted-Pair Link Segment Connector

From the above, it should be appreciated that one skilled in the art commonly uses the term "contacts" to denote the numbered components of MDI connectors. Moreover, it should be immediately recognized that the Twisted-Pair Link Segment Connector of FIG. 14-21 of IEEE Std. 802.3i is synonymous to the normal network wire connector 38 described in the present

application and illustrated in FIGS. 11 and 13-15 of the present application. Likewise, it should be recognized that the MAU MDI Connector of FIG. 14-20 of IEEE Std. 802.3i is synonymous to the normal input receptacle 48 described in the present application and illustrated in FIG. 14 of the present application. These references clearly illustrate that the industry, even as early as 1990, clearly understood that a network connector comprises a plurality of contacts.

Moreover, Applicant submits that the recitation in the originally-filed specification, including, for example, FIGS. 6, 8, and 10, denoting contacts 1, 2, 3, and 6, or combinations thereof, each relate to the contact numbering conventions of the industry standard.





<u>Fig-10</u>

The originally-filed specification is replete with discussion regarding these contacts and their selection in connection with various embodiments.

Reconsideration and withdrawal of the present rejection are respectfully requested.

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Claims 425-484 stand rejected under 35 U.S.C. §112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. This rejection is respectfully traversed.

The Examiner states that it is unclear whether the claimed "contact" is the same as the

"electrical contact" described in the specification. Applicant respectfully directs the Examiner's

attention to the arguments set forth above for discussion as to "contacts" and the level of

understanding of one skilled in the art.

Reconsideration and withdrawal of the present rejection are respectfully requested.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed,

accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner

reconsider and withdraw all presently outstanding rejections. It is believed that a full and

complete response has been made to the outstanding Office Action and the present application

is in condition for allowance. Thus, prompt and favorable consideration of this response is

respectfully requested. If the Examiner believes that personal communication will expedite

prosecution of this application, the Examiner is invited to telephone the undersigned at

(248) 641-1600.

Respectfully submitted,

Dated: DEC 6, 2011

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